

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of removing photoresist and/or resist residue from a semiconductor substrate, comprising the steps of:
 - (a) providing a semiconductor substrate having photoresist material formed thereon; and
 - (b) removing at least a portion of the photoresist material by exposing the substrate to a co-solvent mixture comprising a carbonate high dipole moment solvent, an oxidizer, and an accelerator, wherein the oxidizer is selected to dissolve bonds in the photoresist material, whereby the accelerator is selected to increase a rate of removal of the photoresist, and whereby the co-solvent mixture dissolves the photoresist material in a substantially layer-by-layer manner at a substantially single pressure.
2. (Original) The method of claim 1, wherein the exposing step includes exposing the substrate to a supercritical fluid in combination with the co-solvent mixture.
3. (Original) The method of claim 1 in which the carbonate is selected from the group consisting of 1,2-Butylene Carbonate, Ethylene Carbonate, Propylene Carbonate and mixtures thereof.
4. (Original) The method of claim 3, wherein the carbonate includes 1,2-Butylene Carbonate.
5. (Original) The method of claim 3, wherein the carbonate includes Propylene Carbonate.
6. (Original) The method of claim 3, wherein the carbonate includes Ethylene Carbonate.

7. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes Dimethyl Sulfoxide.

8. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes Benzyl Alcohol.

9. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes 1,2-Butylene Carbonate, and Dimethyl Sulfoxide.

10. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes 1,2-Butylene Carbonate and Benzyl Alcohol.

11. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes Propylene Carbonate and Benzyl Alcohol.

12. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes Ethylene Carbonate and Benzyl Alcohol.

13. (Currently Amended) The method of claim 1, wherein the high dipole moment solvent eo-solvent mixture includes an aqueous fluoride.

14. (Original) The method of claim 14, wherein the aqueous fluoride is selected from the group consisting of ammonium fluoride, ammonium bifluoride and hydrofluoric acid.

15. (Original) The method of claim 1, wherein the oxidizer is selected from the group consisting of hydrogen peroxide, benzoyl peroxide, urea peroxide and mixtures thereof.

16. (Currently Amended) The method of claim 15, wherein the oxidizer is 10-80% hydrogen peroxide by volume.

17. (Original) The method of claim 1, wherein the accelerator is a C₁-C₂₂ carboxylic acid.
18. (Original) The method of claim 17, wherein the accelerator is selected from the group consisting of formic acid, acetic acid, oxalic acid, citric acid, maleic acid, malic acid, lactic acid, glycolic acid, and L-tartaric acid.
19. (Original) The method of claim 18, wherein the accelerator is formic acid.
20. (Original) The method of claim 1, wherein the accelerator is an organoamine.
21. (Original) The method of claim 20, wherein the accelerator is selected from the group consisting of diethanolamine, diglycolamine, ethylene diamine, isopropyl amine, monoethanol amine, morpholine, and triethanolamine.
22. (Original) The method of claim 1, wherein the accelerator is a salt.
23. (Original) The method of claim 22, wherein the accelerator is selected from the group consisting of ammonium carbamate, ammonium carbonate, ammonium formate, and hydroxy propyl carbamate.
24. (Original) The method of claim 1, wherein the accelerator is a solvent.
25. (Original) The method of claim 24, wherein the solvent is an ether.
26. (Original) The method of claim 25, wherein the ether is 1,3,5 Trixoane.
27. (Original) The method of claim 24, wherein the solvent is a glycol.
28. (Original) The method of claim 27, wherein the glycol is propylene glycol.

29. (Original) The method of claim 24, wherein the solvent is a lower alkyl alcohol.
30. (Original) The method of claim 24, wherein the solvent is selected from the group consisting of methanol and ethanol and mixtures thereof.
31. (Original) The method of claim 1, wherein the exposing step causes stripping of photoresist material from the substrate.
32. (Original) The method of claim 1, wherein the exposing step cleans resist residue from the substrate.
33. (Currently Amended) The method of claim 31, wherein the co-solvent mixture is a first co-solvent mixture and wherein the method further includes the step of, after step (b), exposing the substrate to a second co-solvent mixture comprising a supercritical fluid in combination with isopropyl alcohol.
34. (Original) The method of claim 33, wherein the second co-solvent mixture includes supercritical fluid in combination with isopropyl alcohol and water.
35. (Original) The method of claim 33, wherein the step of exposing the substrate to the second co-solvent mixture removes the first co-solvent mixture from the substrate and dries the substrate.
36. (Original) The method of claim 1, wherein the substrate includes I-line photoresist and wherein the method is for removing the I-line photoresist.
37. (Original) The method of claim 1, wherein the substrate is a substrate previously exposed to ion implantation.
38. (Original) The method of claim 1, wherein the substrate includes aluminum lines formed thereon.

39. (Original) The method of claim 1, wherein the substrate includes at least one integrated circuit device including low-dielectric constant materials.

40. (Original) The method of claim 1, wherein the substrate includes at least one integrated circuit device having high dielectric constant gate materials.

41. (Original) The method of claim 1, wherein the substrate includes back anti-reflective coating and wherein the method removes the back anti-reflective coating from the substrate.

42. (Currently Amended) The method of claim 1, wherein the substrate includes deep UV photoresist and wherein the method removes the [[DUV]] deep UV photoresist from the substrate.

43. (Original) The method of claim 1, wherein the substrate includes post-ash residues, and wherein the method includes removing the post-ash residues from the substrate.

44. (Original) The method of claim 1, wherein the substrate includes photoresist and post-etch residues, and wherein exposure of the substrate to the co-solvent mixture removes both the photoresist and the post-etch residues from the substrate .

45. (Currently Amended) The method of claim [[1]] 2, wherein the supercritical fluid is supercritical carbon dioxide.

Claims 46-76. (Canceled).